

REMARKS

This responds to the Office Action mailed on November 9, 2006. Claims 1, 7-15, 17-19, 22, 24-30 are amended, claims 5-6, 16 and 23 are canceled, and no claims are added. Thus, claims 1-4, 7-15, 17-22 and 24-30 are now pending in this application.

Objections to the Drawings

Applicant respectfully traverses the objection under 37 CFR.1.84(p)(4), and asserts the same reference character was used to designate the same part in the drawings. Applicant is not aware of a requirement that the same part must be referred to using exactly the same term throughout the specification of the application.

Applicant respectfully submits that the amendments to the specification address the concerns raised in the objections to the drawings. No new matter is added with the amendments to the specification. Applicant respectfully requests withdrawal of the objections to the drawings.

§102 Rejection of the Claims

Claims 1-2, 4, 6, 12, 15 and 20-21 were rejected under 35 U.S.C. § 102(b) for anticipation by Julstrom et al. (US 2003/0044033).

Julstrom relates to a hearing aid system with a primary audio source such as a hearing aid microphone, a secondary audio source such as a directional microphone, and switch circuitry to select which of the primary and secondary audio sources should be directed to the hearing aid circuitry (Abstract). The detection switch circuitry receives a signal transmission from the secondary audio source, determines whether the signal received is desirable, and selects that signal for coupling with the hearing aid circuitry if the signal transmission from the secondary source is desirable (Abstract). The switch selects either the primary or secondary audio source to provide an audio signal to the hearing aid circuitry, depending whether the receiver 1621 receives an input signal 1627 from the secondary audio source that represents a desired signal (FIG. 16; paragraphs 0078-0080).

Upon review of the cited portions of Julstrom relied upon in the rejection, Applicant respectfully submits that the hearing aid circuitry of Julstrom is connected either to the primary

or secondary audio sources. Applicant respectfully asserts that these portions of Julstrom do not show or suggest a receiver that does not generate an output acoustic signal when an input from the secondary audio source is above a threshold. If the hearing aid circuit did not generate an output acoustic signal when the input from the secondary audio source is determined to be a desired signal, Julstrom et al. would be inoperable for its intended purpose to provide the secondary audio source as an alternative to the primary audio source / transducer (Abstract; paragraphs 0006-0008).

Applicant further submits that, based upon review of the cited portions of Julstrom relied upon in the rejection, an input from the secondary audio source is passed to the hearing aid circuitry when the input is above a threshold. Applicant respectfully asserts that these portions of Julstrom do not show or suggest storing data in memory for use to construct a substitute waveform to generate an output acoustic signal. If the hearing aid circuit did substitute a waveform generated from data stored in memory to generate an output acoustic signal when a signal from a secondary audio source is above a threshold, Julstrom et al. would be inoperable for its intended purpose to provide the secondary audio source as an alternative to the primary audio source / transducer (Abstract; paragraphs 0006-0008).

With respect to independent claim 1, Applicant is unable to find, in the cited portions of Julstrom, a method to block data transmission interference from an input of a receiver in a hearing instrument that includes controlling a presentation of a signal to the input of the receiver such that, when the trigger associated with a data transmission has occurred, the receiver either does not generate an output acoustic output signal, or generates an output acoustic signal representative of a substitute waveform generated from data stored in a memory of the hearing instrument, as recited in the claim. Thus, independent claim 1 is asserted to be in condition for allowance. Claims 1 and 4 depend on independent claim 1, and are asserted to be in condition for allowance for at least the reasons provided with respect to claim 1. Claim 6 is canceled.

With respect to independent claim 12, Applicant is unable to find, in the cited portions of Julstrom, a hearing instrument that includes means to block the signal representative of the acoustic-based signal for at least a portion of a time period when the data receiver receives a data transmission such that the output acoustic signal does not include noise attributed to the data transmission and means for controlling a presentation of a signal to the input of the receiver such

that, when the trigger associated with a data transmission has occurred, the receiver either does not generate an output acoustic output signal, or generates an output acoustic signal representative of a substitute waveform generated from data stored in a memory of the hearing instrument, as recited in the claim. Thus, independent claim 12 is asserted to be in condition for allowance.

With respect to independent claim 15, Applicant is unable to find, in the cited portions of Julstrom, a hearing instrument that includes a memory including data stored in the memory representative of a substitute waveform signal, a second signal path to carry a signal representative of the substitute waveform signal from the memory to the second input of the switch, and a controller to receive a trigger signal indicative of a data transmission occurrence, and to communicate with the switch to selectively disconnect the first input from the output during at least a portion of the data transmission occurrence such that interference associated with the data transmission occurrence is not transferred to the hearing instrument receiver and connect the second input to the output during at least a portion of the data transmission occurrence, as recited in the claim. Thus, independent claim 15 is asserted to be in condition for allowance. Claims 20-21 depend on independent claim 15, and are asserted to be in condition for allowance for at least the reasons provided with respect to claim 15.

§103 Rejection of the Claims

Claims 22 and 32-33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Julstrom et al. (US 2003/0044033).

With respect to independent claim 22, Applicant is unable to find, in the cited portions of Julstrom, a showing or suggestion of a controller to receive the data signal and store programming instructions contained in the data signal for the hearing instrument in a program memory module, as recited in the claim. The rejection relies on the signal from the secondary audio source, and Applicant cannot find a showing or suggestion that the secondary audio source in Julstrom provides programming. Further, Applicant is unable to find, in the cited portions of Julstrom, a showing or suggestion of a controller that operates to selectively block the processed acoustic-based signal from passing as the digital output signal, and further operates to control a presentation of a signal to the input of the receiver such that either the receiver does not generate

an output acoustic signal or the receiver generates an output acoustic signal representative of a substitute waveform generated from data stored in a memory of the hearing instrument, as recited in the claim. Claims 32-33 depend on independent claim 22, and are asserted to be in condition for allowance for at least the reasons provided with respect to claim 22.

Claims 3 and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Julstrom et al. in view of Baechler (US 6,768,802). Claim 3 depends on claim 1, and is asserted to be in condition for allowance for at least the reasons provided with respect to claim 1. Claim 31 depends on claim 22, and is asserted to be in condition for allowance for at least the reasons provided with respect to claim 22.

Claims 5 and 9-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Julstrom et al. in view of Goodman et al. (“Waveform Substitution Techniques for Recovering Missing Speech Segment in Packet Voice Communications,” IEEE Trans. On ASSP, vol. 34, No. 6, Dec. 1986). Claim 9-10 depend on claim 1, and are asserted to be in condition for allowance at least for the reasons provided with respect to claim 1. Claim 5 is canceled.

Applicant traverses any motivation to combine Goodman et al. with Julstrom et al. to modify Julstrom et al. to use “zero substitution” or a “substitute waveform.” Applicant respectfully asserts that zero substitution or a substitute waveform stored in a memory would make Julstrom et al. inoperable for its intended use to provide the secondary audio source as an alternative to the primary audio source.

Claims 7-8, 13, 16-18, and 23-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Julstrom et al. in view of Williams (US 4,965,822). Claims 7-8 depend on claim 6, which depends on claim 1. Applicant asserts claims 7-8 are to in condition for allowance at least for the reasons provided with respect to claim 1. Claim 13 depends on claim 12, and is asserted to be in condition for allowance at least for the reasons provided with respect to claim 12. Claim 16 is canceled. Claims 17-18 depend on claim 15, and are asserted to be in condition for allowance at least for the reasons provided with respect to claim 15. Claim 23 is canceled. Claim 24 depends on claim 22, and is asserted to be in condition for allowance at least for the reasons provided with respect to claim 22.

Applicant traverses any motivation to combine Williams with Julstrom et al. to use an ambient waveform when the primary audio signal is blocked. Applicant respectfully asserts that

the ambient waveform would make Julstrom et al. inoperable for its intended use to provide the secondary audio source as an alternative to the primary audio source.

Claims 11, 14, 19 and 25-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Julstrom et al. in view of Goodman et al., and Williams. Claim 11 depends on claim 1, and is asserted to be in condition for allowance at least for the reasons provided with respect to claim 1. Claim 14 depends indirectly on claim 12, and is asserted to be in condition for allowance at least for the reasons provided with respect to claim 12. Claim 19 depends on claim 15, and is asserted to be in condition for allowance at least for the reasons provided with respect to claim 15. Claims 25-30 depend either directly or indirectly on claim 22, and are asserted to be in condition for allowance at least for the reasons provided with respect to claim 22.

Applicant traverses any motivation to combine Julstrom et al. with Goodman et al. and Williams. Julstrom et al. would not be modified to use zero substitution or substitute signal or ambient sound, as such a modification would make Julstrom et al. inoperable for its intended use to provide the secondary audio source as an alternative to the primary audio source.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/797,217

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Title: HEARING INSTRUMENT WITH DATA TRANSMISSION INTERFERENCE BLOCKING

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Dkt: 1899.005US1

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6960 to facilitate prosecution of this application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 9 day of March 2007.

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Signature